

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-43. (cancelled)

44. (new) A method of preparing a dairy product in a production line comprising:

introducing by continuous injection, via the production line, at least one sterol and/or stanol ester into a dairy composition to obtain a mixture, said ester being at a temperature T_1 , higher than or equal to the melting temperature of said ester and ranging from 35 to 80°C, and said dairy composition having a temperature T_2 at least equal to T_1 , wherein,

said ester is introduced without thickener and without emulsifier,

said dairy composition is obtained by treating a milk-based initial composition containing milk proteins and is without emulsifier, and

introducing of said ester takes place before homogenizing said mixture.

45. (new) The method according to claim 44, wherein said ester is introduced at a temperature T_1 ranging from 40 to 70°C.

46. (new) The method according to claim 44, further comprising

treating said milk-based initial composition by preheating at a temperature of approximately 50°C to approximately 70° to obtain said dairy composition, said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C; and

homogenizing said mixture obtained from introducing said ester into said dairy composition.

47. (new) The method according to claim 44, further comprising:

heating said dairy composition prior to introducing said ester to obtain a temperature T_2 of approximately 85°C to approximately 100°C; and

homogenizing said mixture obtained from introducing said ester to said dairy composition.

48. (new) The method according to claim 44, further comprising:

heating said dairy composition to obtain a temperature T_2 of approximately 85°C to approximately 100°C;

holding said mixture obtain from introducing said ester into said dairy composition for a period of time to obtain a held mixture, said period of time being sufficient to maintain said dairy composition at said temperature T_2 to destroy vegetative microbial flora; and

homogenizing said held mixture.

49. (new) The method according to claim 44, further comprising:

treating said initial milk-based composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition, said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture; and

holding said heated homogenized mixture.

50. (new) The method according to claim 44, comprising:

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture; and, optionally,

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and

said protein network, and exhibiting no phase difference between said aqueous phase and said protein network.

51. (new) The method according to claim 44, further comprising

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture; and, optionally,

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester,

included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network; and

adding a fruit preparation without sterol and/or stanol to said final white mass.

52. (new) The method according to claim 44, further comprising:

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture; and, optionally,

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network; and

adding a cereal composition without sterol and/or stanol to said final white mass.

53. (new) The method according to claim 44, further comprising:

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture; and, optionally,

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network; and

adding a fruit preparation without sterol and/or stanol to the final white mass, said fruit preparation comprising a thickener selected from the group consisting of xanthan gum, pectin, starch, gelan gum, cellulose and its derivatives, guar gum, carob gum, and inulin, said thickeners being approximately present in a concentration of 0.4% to approximately 3% of said fruit preparation.

54. (new) The method according to claim 44, further comprising:

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture for a duration of approximately 4 minutes to approximately 10 minutes to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture; and, optionally,

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final

white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network.

55. (new) The method according to claim 44, further comprising:

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture for a duration of approximately 4 minutes to approximately 10 minutes to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture;

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network; and

adding a cereal composition without sterol and/or stanol to said final white mass.

56. (new) The method according to claim 44, further comprising:

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture for a duration of approximately 4 minutes to approximately 10 minutes to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture;

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network; and

adding a fruit preparation without sterol and/or stanol to said final white mass.

57. (new) The method according to claim 44, further comprising:

treating said milk-based initial composition by preheating to a temperature of approximately 50°C to approximately 70°C to obtain said dairy composition; said dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

homogenizing said mixture obtained from introducing said ester to said dairy composition at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture for a duration of approximately 4 minutes to approximately 10 minutes to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture to a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture;

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network; and

adding a fruit preparation without sterol and/or stanol to said final white mass, said fruit preparation comprising a thickener selected from the group consisting of xanthan gum, pectin, starch, gelan gum, cellulose and its derivatives, guar

gum, carob gum, and inulin, said thickeners being approximately present in a concentration of 0.4% to approximately 3% of said fruit preparation.

58. (new) The method according to claim 44, wherein said milk-based initial composition comprises milk, milk powder, milk proteins and an agent in a concentration sufficient to limit syneresis, said agent being selected from the group consisting of alginates, maltodextrins, pectins, soluble fibres, starch and inulin.

59. (new) The method according to claim 44, wherein said ester is selected from the group consisting of: 22-dihydroergosterol, 7.24(28)-ergostadienol, campesterol, neospongosterol, 7-ergosterol, cerebisterol, corbisterol, stigmasterol, flocosterol, α -spinasterol, sargasterol, 7-dehydrocryonasterol, poriferasterol, chondrillasterol, β -sitosterol, cryonasterol (γ -sitosterol), 7-stigmasternol, 22-stigmasternol, dihydro- γ -sitosterol, β -sitostanol, 14-dehydroergosterol, 24(28)-dehydroergosterol, ergosterol, brassicasterol, ascosterol, episterol, fecosterol and 5-dihydroergosterol, and mixtures thereof.

60. (new) The method according to claim 44, wherein said ester is introduced at a first flow rate and said milk-based initial composition is at a second flow rate, and the ratio of said first flow rate to said second flow rate ranges from approximately 0.5 to approximately 3.

61. (new) A product, being presented in the form of a firm natural yogurt product, obtained according to the method of claim 44, wherein said method comprises:

treating a milk-based initial composition, containing milk proteins and without emulsifier at a of approximately 50°C to approximately 70°C to obtain a dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

introducing into said dairy composition at least one sterol ester at a temperature T_1 , in order to obtain a mixture;

homogenizing said mixture at a pressure of approximately 100 bars to approximately 280 bars to obtain a homogenized mixture;

heating said homogenized mixture at a heating temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture;

holding said heated homogenized mixture for a duration of approximately 4 minutes to approximately 10 minutes to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture at a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture; and, optionally

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network.

62. (new) A product, being presented in the form of a stirred natural or fruit yogurt or drinking yogurt, said product being as obtained according to the method of claim 44, wherein said method comprises:

treating a milk-based initial composition, containing milk proteins and without emulsifier at a of approximately 50°C to approximately 70°C to obtain a dairy composition having a temperature T_2 of approximately 50°C to approximately 70°C;

introducing into said dairy composition of at least one sterol and/or stanol ester, without thickener and without emulsifier, at a temperature T_1 , in order to obtain a mixture;

homogenizing said mixture at a pressure of approximately 100 bars to approximately 280 bars;

heating said homogenized mixture at a temperature of approximately 85°C to approximately 100°C to obtain a heated homogenized mixture; and

holding said heated homogenized mixture for a duration of approximately 4 minutes to approximately 10 minutes to obtain a heated and homogenized held mixture;

fermenting said heated and homogenized held mixture at a temperature of approximately 30°C to approximately 47°C to obtain a fermented mixture; and

smoothing said fermented mixture to obtain a final white mass, comprising an aqueous phase, a protein network, and a fatty phase, said fatty phase corresponding to said ester, included by said homogenizing in said protein network formed by said milk proteins and milk of said dairy composition, said final white mass exhibiting a homogeneity between said fatty phase and said protein network, and exhibiting no phase difference between said aqueous phase and said protein network; and

adding a fruit preparation without sterol and/or stanol to said final white mass.

63. (new) A product as obtained according to the method according to claim 44, comprising approximately 0.1% to approximately 3% sterol and/or stanol ester.